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Entrepreneurial Mindsets for Innovative Brand Development: Case Studies in Jewellery Education

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Abstract

Since 1992, there has been development of a triple helix of university-industry-government in the jewellery industry to produce middle management for original equipment manufacturing (OEM), which is mostly typical in Thai industry. To promote the export market, jewellery manufacturers needed to develop added-value products along the lines of an original brand manufacturing (OBM) model. Thai government policy has been to promote research and innovation in universities for transfer to industry and subsequent development of innovative products and brand image. Hence, new materials and innovative technologies needed to be delivered to the Thai jewellery industry. However, there were struggles with OEM to develop a brand image among the mindsets of workers. Therefore, the innovation-branding development concept was introduced in small- to medium-sized enterprises. University business incubators were introduced as a scientific classroom-based activity of material science program focusing on gems and jewellery to develop interpersonal skills and entrepreneurial mindsets. This paper reports on the development of entrepreneurial mindsets in this environment and the diffusion of marketing and technological concepts in the industry. A dummy company was established, and it selected innovations from universities for students to role-play brand manufacturers, selling products in international trading fairs. These activities began in 2009 and the careers of the key persons involved have been followed. Data was collected on the success of their careers as entrepreneurs after graduation. The results show that they are eager and persistent to do the business and develop their own brand right after graduation. Some characteristics such as engagement, social responsibilities, participative behaviour and honesty in business were displayed.

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Keywords: Entrepreneur, Brand Development, Jewellery Education, Triple Helix

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1. Introduction

The model of triple-helix model as competitive advantage strategy in the world market has been widely recognized in developed countries (Etzkowitz et.al 1994). The model supported the needs of industries to work closely with universities to maintain the sustainable development as well as supporting roles of government as policy makers. The triple helix of university-industry-government in Thailand was practically introduced for jewellery education since 1992 (Wongpreedee et.al 2014). The industry was a driving force by Thai Gems and Jewellery traders Association (TGJTA) to collaborate work with the university and government. It was due to a shortage of management and proper training in jewellery industry as original equipment manufacturing (OEM) during industrialization in 1980s. The human resource development had been focused through ministry of education via universities and commercial policies were supported by ministry of commerce via a public organization. The success work was reflected by the total export values of jewellery, gemstones and diamonds rose from US$1.46 Million in 1992 to US$ 13.15 Million in 2012.

The export values were based on the typical jewellery manufacturing in Thailand during industrialization age as OEM relying on the mobilization of resources and productivities such as unit costs, labor and so on. To escalate and promote the market, Thai government policies recently supports the development activities of added-values products along the lines of an original brand manufacturing (OBM) as well as triple helix networks. The question arises whether this is the transition of existing Thai OEM to OBM, or new entrepreneurial manufacturing specialist come to play role as “branders”. This paper is categorized into three parts. Firstly, it is focused on the mindset of industrialized manufacturers and their activities as a triple helix system. Then, the case studies of university activities both undergraduate and graduate study are reported the role-play brand manufacturer and the development of activities. Lastly, the discussions of student performance are drawn.

2. Literature Review

Globalization has altered the patterns of international trade moving to the Asian economics. Asian economics of developing countries rely on export-oriented growth over three to four decades. The key to success in Asian buyer-driven chains was to move from OEM (original equipment manufacturing) role to ODM (original design manufacturing) and/or to OBM (original brand manufacturing). Triple helix model were introduced as the evolution of innovation systems that university can play an important role in innovation and knowledge-based in societies explaining to three configurations of triple helix models (Etzkowitz et.al.2000). The triple helix III model is more prominent due to the emerging and overlap role of the others obtaining the results of an innovation environment consisting university spin-off firms, entrepreneurs, government laboratories, and academic research groups.

Recently year, there was an empirical case of academic capabilities in Thailand because the normative pressure of accelerate technological upgrading in Thailand were come to the point where losing its comparative advantage as a low-cost production of The Industrialization Age (Liefner et.al 2008). Universities may help to apply knowledge necessary for making this transition by applying OEM-ODM-OBM technical progress and learning strategy (Berger et.al 2006). The challenges of manufacturing to become “branders” were suggested with the requirement of collaboration of academic and industry, customer orientations, a focus on quality and innovation, and constant communication (Birnik et.al 2010). The concept of entrepreneurship was introduced to university to theoretical and practical knowledge and skills which develop and produce goods and services (Erosa,V.E. 2012). Universities had been changed gradually their education and research orientation into a new venue (Moica et.al 2012).

3. Methodology

Brand development is a challenge of Thailand which is a developing country. Jewellery industry is paid attention from the government to develop "branders" of OEM to OBM since the jewellery industry play an important role of Thai economic due to the export values were about 3-4 percent of GDP for decade consecutively. Conceptual framework of brand development of jewellery industry from triple-helix system were drawn as three parties of their inputs to develop the brand as shown in Figure 1. This work had been observed to three main schemes as described above. The methods of observation were described as following:

1. ***Industry mindsets of manufacturer from OEM to OBM***
   The interview of CEO representatives of various sizes of manufacturing from small, medium and large scales were report. The explanations of jewellery structure in Thailand were indicated here. The brand development from triple-helix system was discussed whether it is success to develop the brand.

2. ***Case study of teaching and learning activities***
   The brief of jewellery education in Thailand were introduced. The matching between innovation, human, and knowledge were given as a case study. The university business incubators were drawn the processes of role-play brand manufactures as scientific classroom-based activities both graduate and undergraduate levels.

3. ***Output and their performance***
   The performances of role-play brand manufacturers were measured while selling products in an international trading fair. Their careers were monitored as entrepreneurs after graduation. Some characteristics relating to behaviour and honesty in business were reported.

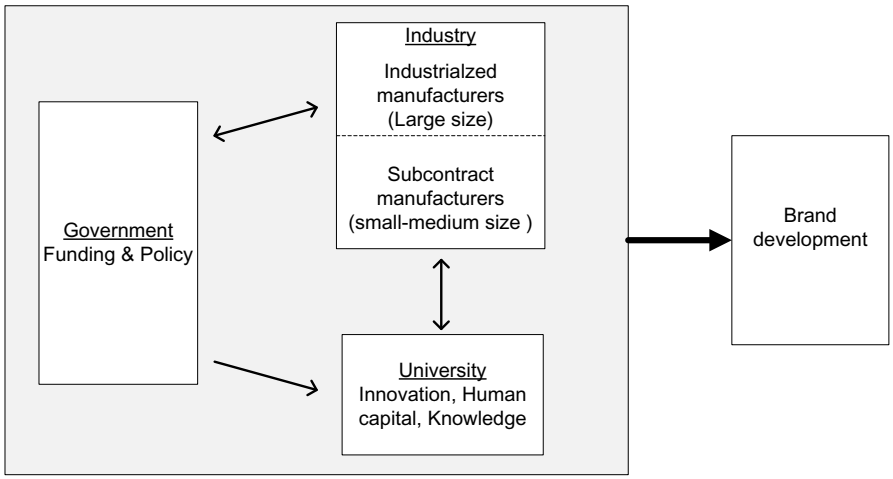

Figure 1. Conceptual framework of brand development of jewellery industry from triple-helix system

4. Finding and Discussion

Industry mindsets of manufacturer from OEM to OBM

There were various perceptions of transferring from OEM to OBM according to the scale of manufacturing as shown in Table 1. The first perception was arisen from a large scale of manufacturing. Due to the large scale of production and long experience, manufacturers owned the strong foundations of technology and conservative workers. The mindset of large manufacturing owners were from the success during industrialization therefore, the concept of "branders" were believe that it was hard to become a brander. The only success of branding concept arose from quality of products and large amount of marketing budgets. Medium size manufacturers were somewhat believe in the transformation of branding manufacturers. It is more likely to see the cluster works while the activities of government-industry collaboration. Mostly, the business models were gradually shifted from OEM to ODM and ODM to OBM. Small size manufacturers were eager to develop the brand due to the endeavor of owners to have high success and social acceptance of young generation (generation "y"). They were believed in the concepts of branding as "push" strategies of productions. There are no concerns about the marketing since it is directly connected to the customer via the information system tools. Small and medium enterprises seek for innovation form university to develop their own products.

Table 1. Size of manufacturing reflects to the triple helix model.

Size	People	Company experience	Collaboration model
Large	>200	>20 years	Developed by themselves or company requests to government
Medium	50-200	>5 years	Government-industry collaboration
Small	1-50	1-5 years	University-government-industry

Case study of teaching and learning activities

The materials science program was developed by large scale size of manufacturers as a board of TGJTA with the ministry of commerce and Srinakharinwirot university since 1992. It was done by the needs of industry as a triple helix system. The implementation was later done by the committees of curriculum which were composed of TGTJA and university. It was not until last decades that the thesis projects of undergraduate student were introduced to create lots of innovative materials. The course works and activities were assigned students to select one of the potential materials to create a brand concept for the program as implications of internal transformation of the triple helix model.

In 2009, the program was introduced a brand named "Siam Tarawan" from a modified innovation material of Japanese technique called Mokume Gane, textured sheet and patterns of metal from processing technique of metal sheets. The innovation processes were introduced and taught in a separate subject of Mateirals Art and Technology. The role plays of brand manufacturers as a dummy company were coached via a production management class. All students were taken responsibilities as a company set-up to develop entrepreneurial mindsets in the environment of marketing and technology combinations. The products were produced as other accessories besides traditional jewellery for example watches and cufflinks as shown in Figure 2 a). The products were sold out before the last day of the trade fair.

Until 2013, the products were performed by graduate students as a thesis project. The materials were fully developed as evolutionary techniques of innovation. The new materials were lighter and cheaper for 3 times. The textures of patterns could also be predicted by the function of linear logarithm of expansion and reduction in the opposite directions of extrusions. A university business incubator was directly developed with the university research center. The graduate student were established a company while doing thesis. Another brand was introduced under subsidiary of Siam Tarawan during an initial stage in order to move forward to the markets. It is also noted that the market were better if the products were sold under the stories of innovation technique and processes as shown in Figure 2 b).

a)

b)

Figure 2 a) The first master pieces of watch under Siam Tarawan brand of undergraduate student work b) an innovation products of Smithy brand, subsidiary of Siam Tarawan, of graduate student work

Output and their performance

Since the entrepreneurial mindset activities began, the careers of the key persons of were indicated that 15 main people (3 people each year from 2009-2013) from an undergraduate program were foster the development of useful skills and personality traits such as pro-active, confident, creative, engagement, honesty, and social responsibilities. It was shown that 10 out of 15 people were meet the objective of entrepreneurial educations (6 people are entrepreneurs and 4 are in the leadership positions). It is also shown that 3 out of 6 entrepreneurs (50 percent) developed their own brand right immediately.

For graduate study, the measurement was different from undergraduate due to the readiness of graduates which own his small business before entrance the school. The tools of UBI which obtained the budget funding from government help graduate students to develop their own company faster. In this case, the industry as graduate student can be selected a potential innovation from university and can develop the technique via the thesis. The results of a triple helix model can help a graduate student develop the brand and can be trusted to place the products in the shelf of the number one jewellery store selling for tourist markets in Bangkok.

5. Conclusion

This survey, which is conducted on high performing firms of Turkey survived in series of crises, highlighted the relationship among the leadership style, learning orientation and firm performance. The most striking result to emerge from data is that commitment to learning and shared vision and open-mindedness mediates the effects of task oriented leadership and relations oriented leadership behavior on firm performance. So, H2 (learning orientation mediates the relationship between task-oriented leadership and firm performance) and H3 (learning orientation mediates the relationship between relations-oriented leadership and firm performance) are fully supported. These findings are consistent with the literature on leadership and learning orientation. Although there are so many studies examining the learning orientation-firm performance relation (Farrell et al., 2008; Mavondo et al., 2005; DeGeus, 1988; Sinkula et al., 1997; Dickson, 1992) and leadership and learning orientation relation (Senge, 1990; Senge et al., 1994; Harbone and Johne, 2003; McDonough, 2000; Aragon-Correa et al., 2007) in literature; the mediator effect of learning orientation on the relationship between leadership behavior and firm performance is examined and revealed for the first time through that survey, which differentiates this survey from others.

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